



Docket No. PRD2168USPCT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants : Freyne, Eddy J. et al.

Serial No. : 10/596,509

Art Unit: 1624

Filed : December 15, 2004

Examiner:

For : 3-CYANO-QUINOLINE DERIVATIVES WITH  
ANTIPROLIFERATIVE ACTIVITY

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November 2, 2006

(Date of Deposit)

Alana G. Kriegsman

(Name of applicant, assignee, or Registered Representative)

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(Signature)

November 2, 2006

(Date of Signature)

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INFORMATION DISCLOSURE STATEMENT

Dear Sir:

Pursuant to 37 C.F.R. §1.56 and in accordance with 37 C.F.R. §§1.97-1.98, information relating to the above-identified application is hereby disclosed. Inclusion of information in this statement is not to be construed as an admission that this information is material as that term is defined in 37 C.F.R. §1.56(b).

Applicant(s) reserve(s) the right to establish the patentability of the claimed invention over any of the information provided herewith, and/or to prove that this information may not be prior art, and/or to prove that this

information may not be enabling for the teachings purportedly offered.

This statement should not be construed as a representation that a search has been made, or that information more material to the examination of the present patent application does not exist.

☒ In accordance with §1.97(b), since this Information Disclosure Statement is being filed either within three months of the filing date of the above-identified national application (other than a continued prosecution application under §1.53(d)), within three months of the date of entry into the national stage of the above identified application as set forth in §1.491, or before the mailing date of a first Office Action on the merits of the above-identified application, or before the mailing date of a first Office Action after the filing of a request for continued examination under §1.114, no additional fee is required.

☐ In accordance with §1.129(a), this Information Disclosure Statement is being filed in connection with ☐ the first or ☐ second After Final Submission, therefore:

☐ Statement in Accordance with §1.97(e)  
(attached); or

☐ Please charge Deposit Account No. 10-  
0750/ / the fee of \$180.00 as set forth  
in §1.17(p).

☐ In accordance with §1.97(c), this Information Disclosure Statement is being filed after the period set forth in §1.97(b) above but before the mailing date of either a Final Action under §1.113 or a Notice of Allowance under §1.311, or an action that otherwise closes prosecution and that it is accompanied by one of:

- ☐ Statement in Accordance with §1.97(e)  
(attached); or
- ☐ Please charge Deposit Account No. 10-  
0750/ / the fee of \$180.00 as set forth  
in §1.17(p).

☐ In accordance with §1.97(d), this Information Disclosure Statement is being filed after the mailing date of either a Final Action under §1.113 or a Notice of Allowance under §1.311 but before the payment of the Issue Fee. Applicant(s) hereby petition(s) for consideration of this Information Disclosure Statement. Included are: Statement in Accordance with §1.97(e) as set forth below and the fee of \$180.00 as set forth in §1.17(p).

☒ Copies of each of the references listed on the attached Form PTO-1449 are enclosed herewith.

☐ Copies of references listed on the attached Form PTO-1449 are enclosed herewith EXCEPT THAT:

☐ In view of the voluminous nature of references [list as appropriate], and the likelihood that these references are available to the Examiner, copies are not enclosed herewith.

☐ If any of the foregoing publications are not available to the Examiner, Applicant will endeavor to supply copies at the Examiner's request.

☒ Copies of only foreign patent documents and non-patent literature are enclosed in accordance with 37 CFR 1.98 (a) (2).

☒ There are no listed references which are not in the English language.

☐ The relevance of those listed references which are not in the English language is as follows:

☒ Attached are copies of search report(s) from corresponding patent application(s), which are listed on the attached Submission Under MPEP 609 D.

☐ Attached are the following non-published pending patent applications which may be deemed relevant, which are listed on the attached Submission Under MPEP 609 D.

Please charge any deficiency or credit any overpayment to Deposit Account No. 10-0750/PRD2168USPCT/AGK. This form is submitted in triplicate.

Respectfully submitted,

/Alana G. Kriegsman/

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DATED: November 2, 2006

<b>Substitute for form 1449A/PTO</b>  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> (use as many sheets as necessary) <b>Sheet 1 of 2</b>	<b>Application Number</b>	10/596,509
	<b>Filing Date</b>	12/15/2004
	<b>First Named Inventor</b>	Eddy J. Freyne
	<b>Group Art Unit</b>	1624
	<b>Examiner Name</b>	
	<b>Attorney Docket Number</b>	PRD2168USPCT

**U.S. PATENT DOCUMENTS**

Examiner Initials	Cite No. <sup>1</sup>	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document mm-dd-yyyy	Pages, Columns, Lines, where relevant passages or relevant figures appear
		Number	Kind Code <sup>2</sup> (if known)			
		6002008		American Cyanamid Company	12-14-1999	
		6288082		American Cyanamid Company	09-11-2001	

**FOREIGN PATENT DOCUMENTS**

Examiner Initials	Cite No. <sup>1</sup>	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document mm-dd-yyyy	Pages, Columns, Lines, where relevant passages or relevant figures appear	T <sup>6</sup>
		Office <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>5</sup>				
		WO	98/043960		American Cyanamid Company	10-08-1998		
		WO	00/018761		American Cyanamid Company	04-06-2000		
		WO	03/082290		Boehringer Ingelheim (English Abstract on front page)	10-09-2003		
		WO	04/105765		Janssen Pharmaceutica	12-09-2004		

Examiner Signature	/Noble Jarrell/ (11/21/2008)	Date Considered	
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\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

1 Unique citation designation number. 2 See attached Kinds of U.S. Patent Documents. 3 Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). 4 For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. 5 Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. 6 Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U. S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS, SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /N.J./ (11/21/2008)

Substitute for form 1449A/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> (use as many sheets as necessary) Sheet 2 of 2	<b>Application Number</b>	10/596,609
	<b>Filing Date</b>	12/15/2004
	<b>First Named Inventor</b>	Eddy J. Freyne
	<b>Group Art Unit</b>	1624
	<b>Examiner Name</b>	
	<b>Attorney Docket Number</b>	PRD2168USPCT

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS			
Examiner's Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T <sup>2</sup>
		BROWN et al., "High Throughput Screening", 1997, editors: Devlin, John P., Publishers: Dekker, New York, N.Y., pages 317-328.	
		BURKE, Terrence R. Jr., "Protein-tyrosine Kinase Inhibitors", <u>Drugs of The Future</u> , 1992, pages 119-131, Vol. 17, No. 2.	
		DAVIES et al., "Specificity and Mechanism of Action of Some Commonly Used Protein Kinase Inhibitors", <u>Biochemical Society</u> , 2000, pages 95-105, Vol. 351.	
		DELIA, Thomas, "Fused Pyrimidines, Part Four, Miscellaneous Fused Pyrimidines: Chapter VI-Pyrimidotriazines.", <u>Heterocyclic Compounds</u> , John Wiley & Sons, Inc., Interscience Publications, pages 261-304.	
		DRUKER et al., "Lessons Learned From The Development of An Abl Tyrosine Kinase Inhibitor For Chronic Myelogenous Leukemia", <u>The Journal of Clinical Investigation</u> , January 2000, pages 3-7, Vol. 5, No. 1.	
		ELDER et al., "Overexpression of transforming growth factor alpha in psoriatic epidermis", <u>Science</u> , 1989, pages 811-814, Vol. 243.	
		GENNARO et al. <u>Remington's Pharmaceutical Sciences</u> , 19 <sup>th</sup> ed., Mack Publishing Company, 1990, see especially Part 8: Pharmaceutical preparations and their Manufacture.	
		GREENE et al., "Protective Groups in Organic Synthesis", 2 <sup>nd</sup> edition, Wiley Interscience, 1991.	
		HENNEQUIN, et al.: "Novel 4-Anilinoquinazolines with C-7 Basic Side Chains: Design and Structure Activity Relationship of a Series of Potent, Orally Active, VEGF Receptor Tyrosine Kinase Inhibitors", <u>Journal of Medicinal Chemistry</u> , March 14, 2002, pages 1300-1312, Vol. 45, No. 6, American Chemical Society, Washington, US, XP002256124.	
		MORIN, Michael J., "From Oncogene to Drug: Development of Small Molecule Tyrosine Kinase Inhibitors as Anti-tumor and Anti-angiogenic Agents", <u>Oncogene</u> , 2000, pages 6574-6583, Vol. 19.	
		NAGAMATSU et al., "Syntheses of 3-Substituted 1-Methyl-6-Phenylpyrimido[5,4-e]-1,2,4-triazine-5,7(1H,6H)-diones (6-Phenyl Analogs of Toxoflavin) and Their 4-Oxides, and Evaluation of Antimicrobial Activity of Toxoflavins and Their Analogs", <u>Chem Pharm Bull.</u> , 1993, pages 362-368, Vol. 41, No. 2.	
		NAGAMATSU et al., "General Syntheses of 1-Alkyltoxoflavin and 8-Alkylfervenuin Derivatives of Biological Significance By The Regioselective Alkylation of Reumycin Derivatives And The Rates of Transalkylation From 1-Alkyltoxoflavins Into Nucleophiles.", <u>J. Chem. Soc. Perkin Trans. 1</u> , 2001, pages 130-137.	
		PALMER, B.D. et al.: "Tyrosine Kinase Inhibitors 11 Soluble Analogs of Pyrrolo-and Pyrazoloquinazolines as Epidermal Growth Factor Receptor Inhibitors: Synthesis, Biological Evaluation, and Modeling of the Mode of Binding", <u>Journal of Medicinal Chemistry</u> , 1997, pages 1519-1529, Vol. 40, No. 10, American Chemical Society, Washington, US, XP002094613.	
		SHAWVER et al., "Smart Drugs: Tyrosine Kinase Inhibitors In Cancer Therapy", <u>Cancer Cells</u> , March 2002, pages 117-123, Vol. 1.	
		WISSNER et al., "4-Anilino-6,7-dialkoxyquinoline-3-carbonitrile Inhibitors of Epidermal Growth Factor Receptor Kinase And Their Bioisosteric Relationship To The 4-Anilino-6,7-dialkoxyquinazoline Inhibitors", <u>Journal of Medicinal Chemistry</u> , 2000, pages 3244-3256, Vol. 43, No. 17, American Chemical Society, Washington, US.	

Examiner Signature	/Noble Jarrell/ (11/21/2008)	Date Considered	
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